p-ISSN: 2089-6778
e-ISSN: 2549-5054

# PARTICIPATION OF PREGNANT MOTHERS IN THE TRIPLE ELIMINATION PROGRAM FOR HIV, SYPHILIS AND HEPATITIS B DURING THE COVID-19 PANDEMIC IN MATARAM CITY, 2021

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**ARTICLE INFORMATION**

**Received:**
November 29, 2021

**Revised:**
January 10, 2022

**Accepted:**
January 15, 2022

**Available Online:**
January 31, 2022

**Abstrak**

Penularan perinatal dari ibu ke bayi masih cukup tinggi, terbukti dari 28.314 ibu hamil yang dites HIV pada Januari-September 2012, sebanyak 812 ibu hamil (2,9%) terinfeksi HIV. Wanita hamil di Triple Elimination. Program HIV, Sifilis, dan Hepatitis B Pada Pandemi Covid-19 di Kota Mataram. Penelitian ini menggunakan pendekatan kualitatif dan kuantitatif dengan deskriptif analitis. desain dengan desain penampang. Analisis data meliputi analisis univariabel untuk menggambarkan distribusi frekuensi masing-masing variabel. Program Triple Elimination telah berjalan dengan baik dengan banyak ibu hamil yang memiliki persepsi tinggi terhadap kerentanan Triple Elimination, namun yang perlu ditingkatkan adalah penyuluhan dan informasi tentang HIV dan tes HIV dari petugas kesehatan serta dukungan dari instansi terkait agar program ini berjalan lancar dan ibu hamil dapat melakukan tes Triple Elimination. Penelitian ini menyarankan perlunya penyuluhan dan edukasi tentang tes HIV dari petugas kesehatan dan dukungan dari instansi terkait. Penelitian selanjutnya dapat melihat faktor-faktor yang mempengaruhi kinerja tenaga kesehatan dalam memberikan pendidikan

**Kata kunci**: Ibu Hamil, Triple Elimination, PPIA, Pandemi Covid-19

*Abstract*

*Perinatal transmission from mother to baby is still quite high, as evidenced by 28,314 pregnant women who were tested for HIV in January-September 2012, as many as 812 pregnant women (2.9%) were infected with HIV.This study aims to explore the participation of pregnant women in Triple Elimination. HIV, Syphilis, and Hepatitis B Program in the Covid-19 Pandemic in Mataram City.This study uses a qualitative and quantitative approach with analytical descriptive. design with a cross-sectional design. Data analysis includes univariable analysis to describe the frequency distribution of each variable.The Triple Elimination program has been going well with many pregnant women who have a high perception of the vulnerability of Triple Elimination, but what*


DOI: 10.30591/Siklus.V11i01.3089

p-ISSN: 2089-6778
e-ISSN: 2549-5054

*needs to be improved is counseling and information about HIV and HIV testing from health workers and support from relevant agencies so that this program runs smoothly and pregnant women to do the Triple Elimination test.This study suggests the need for counseling and education about HIV testing from health workers and support from relevant agencies. Future research can look at the factors that affect the performance of health workers in providing education*

**Keywords:** *Pregnant Women, Triple Elimination, PPIA, Covid-19 Pandemic*

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## 1. Introduction

WHO has declared Covid-19 a global pandemic[1]. Nationally through the Decree of the Head of the National Disaster Management Agency Number 9A of 2020 has been updated through Decree number 13A of 2020 regarding the status of certain emergencies situations due to the coronavirus disease outbreak in Indonesia[2]. The incidence of coronavirus in Indonesia is quite high, but compared to Indonesia's population of 267 million people, the ratio of the number of people who are not infected is still higher. So that health service efforts in handling Covid-19 cases such as promotive and preventive remain a concern for health service workers, especially at Public Health Center[3]. Public Health Centers are the front line in breaking the chain of transmission of Covid-19, because Community Health Centers are located in every sub-district and have a regional concept[3].

The degree of health is influenced by 4 interrelated factors, namely the environment (40%), health behavior (30%), health services (20%), and genetics (10%). Based on these four factors, behavioral factors have a big influence. This is influenced by the behavior of the community itself, therefore the implementation of the Healthy Living Community Movement in improving a healthy living culture and cross-sectoral involvement needs encouragement from local governments, starting from the RT/RW level to the central level. The Public Health Center also has the task and function of organizing public health efforts and individual health efforts in the context of meeting minimum service standards for the community that cannot be abandoned during the pandemic, namely sexually transmitted diseases (STDs). The incidence of transmission from mother to child ranks highest in the incidence of transmission in these 3 diseases. Transmission of HIV from mother to child is 20-45%, the transmission of syphilis from mother to child is 69-80% and transmission of Hepatitis B from pregnant women to children is 90-95%[4].

HIV can be transmitted through the exchange of various body fluids from an infected person, such as blood, breast milk, semen, and vaginal fluids. HIV can also be passed from a mother to her child during pregnancy and childbirth[1]. Perinatal transmission from mother to baby is still quite high, as evidenced by 28,314 pregnant women who were tested for HIV in January-September 2012, as many as 812 pregnant women (2.9%) were infected with HIV. Meanwhile, 70 babies were born with a positive HIV test result[5]. Based on the data obtained, the number of HIV/AIDS cases is increasing, in 2017 there were 98 HIV cases and 111


DOI: 10.30591/Siklus.V11i01.3089

p-ISSN: 2089-6778
e-ISSN: 2549-5054

AIDS cases, while in 2018 there were 155 HIV cases and 101 AIDS cases. The number of deaths due to AIDS in NTB Province in 2017 was 22 cases and in 2018 there were 24 deaths due to AIDS[6]

Maternal mortality due to infection is caused by several factors, namely infections of the reproductive organs and sexually transmitted diseases such as HIV, syphilis, and hepatitis. The United Nations Program on HIV and AIDS (UNAIDS) shows that the number of people living with HIV has increased in 50 countries, including in Indonesia, as many as 1.8 million people were were infected with this deadly virus in 2017. Based on this data, 180 thousand children (0-14 years) infected with the virus in 2017 and 110,000 children died from AIDS-related illnesses. The number of cases of Human Immunodeficiency Virus (HIV) in Indonesia for the period January-May 2018 was 12,578 patients, while cases of Acquired Immunodeficiency Syndrome (AIDS) were 3,448 cases[6]. The prevalence of HIV infection in pregnant women is 0.3%, syphilis 1.7%, and hepatitis B 2.5%[6].

The government made various efforts to reduce MMR and IMR in mother-to-child transmission (PPIA), with interventions carried out in the form of comprehensive maternal and child health services, testing and counseling services, administration of antiretroviral drugs (ARV), counseling on HIV and infant food, as well as infant feeding and safe delivery[7]. Implementation of quality HIV testing and integrated with ANC can improve the prevention of HIV transmission from mother to baby[8]. Meanwhile, Gunn's study found that HIV testing initiated by health workers increased the coverage of sexually transmitted infection (STI) and HIV tests compared to the control group (p=0.008)[9].

Service quality is divided into five dimensions, namely Tangibles (physical evidence), Reliability (trust/reliability), Responsiveness (responsiveness), Assurance (guarantee), and Empathy (empathy)[10]. These five dimensions of service quality are used to measure the quality of health services or better known as Service Quality (SERVQUAL). Data from the NTB Provincial Health Office shows that most people with HIV and AIDS are in the 25-49 year age group. However, it has also been found that patients aged > 50 years have developed AIDS. Thus, from 2007 to 2016 the cumulative number of HIV sufferers found in the city of Mataram was 455 patients with details of HIV cases as many as 233 patients, AIDS cases as many as 222 patients with AIDS deaths as many as 105 people[6].

## 2. Method

The research uses qualitative and quantitative approaches, which are descriptive-analytic with a cross-sectional design. This research was conducted at the Mataram City Health Center involving pregnant women who had been offered an HIV test and signed informed consent. This population is all pregnant women in Mataram City. The sample in this study was 30 samples with an additional 10 samples to anticipate sample error. However, when verifying the results of the study, 2 samples could not be used so that the total sample was 38. The sampling technique used was Consecutive sampling. Data collection using primary data collection. The researcher obtained permission to research the Kesbangpol of Mataram City and then submitted an Ethical Clearance. Data collected were primary data obtained directly from pregnant women who had been offered HIV testing. The data analysis used in this research is univariate analysis. Univariate analysis was performed on each research variable. The presentation is done descriptively in the form of a presentation to describe the frequency distribution of the independent variables.


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## 3. Results and Discussion

### Results

**Table 1.1. Identify the Characteristics of Pregnant Women in Mataram City**

| Characteristics of Respondents | n | % |
|---|---|---|
| **Mother's Age** | | |
| 20-35 years old | 35 | 92.1 |
| >35 years old | 3 | 7.9 |
| **Parity** | | |
| Primipara | 21 | 55.3 |
| Multipara | 10 | 26.3 |
| Grandemultipara | 7 | 18.4 |
| **qualification** | | |
| No School | 2 | 5.3 |
| Basic Education | 12 | 31.4 |
| Middle Education | 19 | 50 |
| Higher Education | 5 | 13.2 |
| **Job** | | |
| work | 32 | 84.2 |
| Does not work | 6 | 15.8 |
| **Total** | **38** | **100** |

Based on table 5.1, it can be seen that the majority of pregnant women aged 20-35 years were 35 people (92.1%) and the least was at the age of >35 years, namely 3 people (7.9%). Most of the pregnant women for the first time or primiparas as many as 21 people (55.3%) and the least in grande multipara pregnancies as many as 7 people (18.4%). most of the pregnant women had secondary education as many as 19 people (50%) and at least 2 people did not go to school (5.3%). most of the working pregnant women were 32 people (84.2%) and 6 people were not working (15.8%).

**Table 1.2. Identification of Perceived Vulnerability to Triple Elimination**

| Perception | n | % |
|---|---|---|
| Low | 13 | 34,2 |
| High | 25 | 65,8 |
| Total | 38 | 100 |

Based on table 5.2 it can be seen that most pregnant women have a high perception of 25 people (65.8%) and a low perception of 13 people (34.2%).

**Table 1.3. Identification of Triple Elimination Test Behavior**

| Behavior | N | % |
|---|---|---|
| Not Test | 28 | 73,3 |
| Test | 10 | 26,3 |
| Total | 38 | 100 |

Based on table 5.3 it can be seen that most pregnant women are not willing to do the Triple Elimination test, as many as 28 people (73.3%) and 10 people (26.3%).

### Reasons for Refusing to Do the Triple Elimination Test

What caused the mother not to take the Triple Elimination test?
"don't know where,/scared"
"afraid"
"because I am in good condition and have no signs of HIV"
"feel good"
"because I haven't thought of doing a test yet"

The Triple Elimination Program for HIV, Syphilis, and Hepatitis B has been integrated with ANC (Ante Natal Care) but there are still patients who are not willing to take tests, especially for HIV tests.

### Discussion

This study found that 73.3% of respondents were not willing to take an HIV test through a testing and counseling program initiated by health workers. In general, respondents have low knowledge that affects the behavior of HIV testing in pregnant women. knowledge of HIV/AIDS is a factor that plays a role in HIV testing decisions[11]. There are still respondents who have the wrong knowledge that HIV can be cured, there is immunization to prevent HIV. Not a few respondents think wrongly that the characteristics of PLWHA are thin and susceptible to disease. The wrong assumption that occurs in society is due to unclear and correct information about


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e-ISSN: 2549-5054

Triple Elimination, especially HIV/AIDS.

Another study conducted by Lamarque also showed that knowledge of various aspects of HIV/AIDS was a factor that researchers found could play a role in the decision to test for HIV[11]. This study found no association between perceived susceptibility and HIV testing in pregnant women. The Health belief model (HBM) theory states that the possibility of individuals taking preventive action depends on their belief in their susceptibility to certain diseases. This research is contrary to previous research, because the research conducted by Legiari is voluntary, while this research is a government program. The highest perception of vulnerability was felt by respondents when the husband often went to work out of town and for days. The respondent's wrong perception is that the respondent believes that routine ANC and taking pregnant vitamins will avoid HIV. Health workers need to be more active in providing information about HIV and HIV testing for pregnant women[12].

This study found 26.3% of pregnant women who took an HIV test in the first trimester because it was at this gestational age that the mother first performed a pregnancy check on a health worker. The reason pregnant women do an HIV test in the second trimester of pregnancy is that for the first time they do a pregnancy check at an independent practice midwife (BPM) who does not have a laboratory examination[13]. Exposure to information plays an important role in increasing pregnant women's knowledge about HIV testing in addition to government programs. Previous studies have found that mothers who know about interventions that can reduce the risk of HIV infection in the fetus are three times more likely to receive an HIV test than those who do not know[13]. Knowledge of HIV/AIDS is an important factor in making HIV test decisions[11].

## 4. Conclusion

Based on the results of research and discussion that respondents are not willing to take an HIV test due to low knowledge, it affects behavior in carrying out HIV tests. In addition, the understanding gained by respondents is that immunization can prevent HIV transmission and for pregnant women to consume enough vitamins, perform ANC regularly will avoid HIV. Therefore, this study suggests the need for counseling and education on HIV testing from health workers and support from related agencies. Future research can look at the factors that affect the performance of health workers in providing education.

## 5. Acknowledgment

The team of authors would like to thank the research participants as well as research institutions and community service at the University of Muhammadiyah Mataram who have supported and facilitated research activities so that they could run well.

## 6. References

1. WHO. HIV update. World Health Organ. 2019; https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/hiv/strategic-information/hiv-data-and-statistics.
2. BNPB. Badan Nasional Penanggulangan Bencana Republik Indonesia. Director [Internet]. 2018;15(2):2017–9. Available from: http://bnpb.cloud/dibi
3. Kemenkes RI. Petunjuk Teknis Pelayanan Puskesmas Pada Masa Pandemi Covid-19 [Internet]. kemenkes RI. 2020. 1–65 p. Available from: https://covid19.kemkes.go.id/protokol-covid-19/petunjuk-teknis-pelayanan-puskesmas-pada-masa-pandemi-covid-19/#.X6z9Be77TIU
4. Kementerian Kesehatan Republik. Pedoman Progra Pencegahan Penularan HIV, S ifilis dan Hepatitis B dari Ibu ke Anak. Jakarta; 2019.


DOI: 10.30591/Siklus.V11i01.3089

p-ISSN: 2089-6778
e-ISSN: 2549-5054

5. Dinas kesehatan provinsi nusa tenggara barat. Profil Kesehatan Provinsi NTB 2018. J Chem Inf Model. 2018;1–180.
6. Kemenkes. Peraturan Menteri Kesehatan Republik Indonesia Nomor 52 Tahun 2017 Tentang Eliminasi Penularan Human Deficiency Virus, Sifilis Dan Hepatitis B Dari Ibu Ke Anak. Prog Phys Geogr [Internet]. 2017;14(7):450. Available from: https://tel.archives-ouvertes.fr/tel-01514176
7. Bindoria S V., Devkar R, Gupta I, Ranebennur V, Saggurti N, Ramesh S, et al. Development and pilot testing of HIV screening program integration within public/primary health centers providing antenatal care services in Maharashtra, India. BMC Res Notes [Internet]. 2014;7(1):1–7. Available from: BMC Research Notes
8. Gunn JKL, Asaolu IO, Center KE, Gibson SJ, Wightman P, Ezeanolue EE, et al. Antenatal care and uptake of HIV testing among pregnant women in sub-Saharan Africa: A cross-sectional study. J Int AIDS Soc. 2016;19(1).
9. Ramseook-Munhurrun P, Lukea-Bhiwajee S, Naidoo P. Service Quality in the Public Service. Int J Manag Mark Res. 2010;3(1):37–50.
10. Lamarque K. HIV testing of pregnant women in the Fort Dauphn region of Madagascar. 2013;(March). Available from: https://ir1.sun.ac.za/handle/10019.1/79898
11. Ps TL, Shaluhiyah Z, Suryoputro A. Perilaku Ibu Hamil Untuk Tes HIV di Kelurahan Bandarharjo dan. Perilaku Ibu Hamil Untuk Tes HIV di Kelurahan Bandarharjo dan Tanjung Mas Kota Semarang. 2012;7(1):11.
12. Worku G, Enquselassie F. Factors determining acceptance of voluntary HIV counseling and testing among pregnant women attending antenatal clinic at army hospitals in Addis Ababa. Ethiop Med J. 2007 Jan;45(1):1–8.
13. World Health Organization. The Triple Elimination of Mother-to-Child Transmission of HIV, Hepatitis B and Syphilis in Asia and the Pacific, 2018–2030. 2018;2018–30.


DOI: 10.30591/Siklus.V11i01.3089